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CLAIMS (AMENDMENT UNDER ARTICEL 34)

- 5 1. (Amended) A biocompatible implant, comprising:
A) a biological molecule; and
B) a support, wherein the biological molecule is type
I collagen.
- 10 2. (Cancelled)
3. (Cancelled)
- 15 4. (Cancelled)
5. (Cancelled)
- 20 6. (Cancelled)
7. (Cancelled)
- 25 8. (Cancelled)
- 30 9. (Cancelled)

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10. (Cancelled)

- 5 11. (Amended) Abiocompatible implant according to claim 1,
wherein the biological molecule further includes [type I
collagen or] type IV collagen.
- 10 12. (Amended) Abiocompatible implant according to claim 1,
wherein the biological molecule further includes [collagen
and] a cytokine.
13. A biocompatible implant according to claim 1, wherein
the support is in the form of a membrane.
- 15 14. A biocompatible implant according to claim 1, wherein
the support is in the form of a tube.
15. A biocompatible implant according to claim 1, wherein
the support is in the form of a valve.
- 20 16. A biocompatible implant according to claim 1, wherein
the support includes biodegradable polymer.
- 25 17. A biocompatible implant according to claim 1, wherein
the support includes at least one component selected from
the group consisting of poly(glycolic acid) (PGA),
poly(L-lactic acid) (PLA) and polycaprolactum (PCLA).
- 30 18. A biocompatible implant according to claim 1, wherein
the support includes PGLA having a glycolic acid-to-lactic
acid ratio of from about 90 : about 10 to about 80 : about
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instructions describing usage of the implant,
wherein the instructions describe that the implant
is administered to a predetermined site.

5 38. A medical kit according to claim 37, wherein the
predetermined site is selected from the group consisting
of vascular endothelium, vascular smooth muscle, elastic
fiber, skeletal muscle, cardiac muscle, osteoblast, neuron
and collagen fiber.

10 39. A medical kit according to claim 37, wherein the
instructions describe that the biocompatible implant is
implanted in such a manner that at least a part of an organ
or tissue to be subjected to implantation is left *in situ*.

15 40. (Amended) A method for treating an injured site of a body,
comprising the step of:

A) implanting a biocompatible implant to a part or
whole of the injured site,

20 wherein the biocompatible implant comprises:

A-1) a biological molecule; and

A-2) a support, wherein the biological molecule is
type I collagen.

25 41. A method according to claim 40, wherein in the implanting
step, the biocompatible implant is implanted in such a manner
that at least a part of an organ or tissue to which the injured
site belongs is left *in situ*.

30 42. A method according to claim 40, further comprising
administering a cellular physiologically active substance.

43. A method according to claim 42, wherein the cellular
physiologically active substance is selected from the group

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consisting of a granulocyte macrophage colony stimulating factor (GM-CSF), a macrophage colony stimulating factor (M-CSF), a granulocyte colony stimulating factors (G-CSF), a multi-CSF (IL-3), a leukemia inhibiting factor (LIF), a c-kit ligand (SCF), an immunoglobulin family member, CD2, CD4, CD8, CD44, collagen, elastin, proteoglycan, glycosaminoglycan, fibronectin, laminin, syndecan, aggrecan, an integrin family member, integrin α chain, integrin β chain, fibronectin, laminin, vitronectin, selectin, cadherin, ICAM1, ICAM2, VCAM1, platelet derived growth factor (PDGF), epidermal growth factor (EGF), fibroblast growth factor (FGF), hepatocyte growth factor (HGF) and vascular endothelial growth factor (VEGF), and polypeptides and peptides related thereto..

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44. A method according to claim 40, further comprising performing a treatment for suppressing an immune reaction.

45. (Amended) A method for reinforcing an organ or tissue in a body, comprising the step of:

A) implanting a biocompatible implant to a part or whole of the organ or tissue,

wherein the biocompatible implant comprises:

A-1) a biological molecule; and

A-2) a support, wherein the biological molecule is type I collagen.

46. A method for producing or regenerating an organ or tissue, comprising the steps of:

A) implanting a biocompatible implant to a part or whole of the organ or tissue within an organism containing the organ or tissue,

wherein the biocompatible implant comprises:

A-1) a biological molecule; and

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A-2) a support, wherein the biological molecule is type I collagen; and

B) culturing the organ or tissue within the organism.

- 5 47. Use of a biocompatible implant according to claim 1 for treatment of an injured site within a body.
48. Use of a biocompatible implant according to claim 1 for reinforcement of an organ or tissue within a body.
- 10 49. Use of a biocompatible implant according to claim 1 for production of a medicament for treatment of an injured site within a body.
- 15 50. Use of a biocompatible implant according to claim 1 for production of a medicament for reinforcement of an organ or tissue within a body.
- 20 51. (Amended) A biocompatible tissue support, comprising:
A) a first layer having a rough surface; and
B) a second layer having a strength which allows the second layer to resist in vivo impact,
wherein the first layer is attached to the second layer via at least one point[.], wherein the first layer
25 is a knit, and wherein the second layer is a woven.
52. (Cancelled)
- 30 53. (Cancelled)
54. A support according to claim 51, wherein the rough

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- 5 64. A support according to claim 51, wherein the second layer includes at least one component selected from the group consisting of poly(glycolic acid) (PGA), poly(L-lactic acid) (PLA) and polycaprolactum (PCLA), and a copolymer thereof.
- 10 65. A support according to claim 51, wherein the second layer includes PGLA having a glycolic acid-to-lactic acid ratio of from about 90 : about 10 to about 80 : about 20.
66. A support according to claim 51, wherein the second layer includes poly(L-lactic acid).
- 15 67. (Cancelled)
68. A support according to claim 51, wherein the second layer is a woven of poly(L-lactic acid) and the first layer is a knit of poly(glycolic acid).
- 20 69. A support according to claim 51, wherein the attachment is carried out by:
C) an intermediate layer for attaching the first layer with the second layer.
- 25 70. A support according to claim 69, wherein the intermediate layer is made of a synthetic biological absorbable polymer.
- 30 71. A support according to claim 69, wherein the intermediate layer includes a homopolymer containing a single monomer selected from the group consisting of lactic acid (lactid), glycolide and ϵ -caprolactam or a copolymer containing two or more monomers therefrom.

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comprising a cell.

82. A medicament according to claim 80, for use in implantation into a body.

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83. A medicament according to claim 80, wherein a site of the body into which the biological implant is implanted is selected from the group consisting of cardiac valve, blood vessel, pericardium, cardiac septum, intracardiac conduit, extracardiac conduit, dura mater, skin, bone, soft tissue and trachea.

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84. A medicament according to claim 80, wherein the biocompatible implant is derived from an organism undergoing the implantation.

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85. (Amended) A method for producing a biocompatible tissue support, wherein the biocompatible tissue support comprises:

A) a first layer having a rough surface; and
B) a second layer having a strength which allows the second layer to resist *in vivo* impact, wherein the first layer is attached to the second layer via at least one point, wherein the first layer is a knit, and wherein the second layer is a woven, and

20

the method comprises the step of:
attaching the first layer with the second layer.

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86. A method according to claim 85, wherein the biocompatible tissue support further comprises:

C) an intermediate layer for attaching the first layer with the second layer,

30

the attaching step comprises:

a) providing the intermediate layer between

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91. A method according to claim 90, wherein the attaching step comprises crosslinking treatment.

5 92. A method according to claim 90, wherein the biological molecule is collagen, and the attaching step comprises collagen crosslinking treatment.

10 93. A method according to claim 86, wherein the intermediate layer is produced by casting a film material onto a glass plate, followed by air drying, to form a film.

15 94. A method according to claim 86, wherein the step b) comprises exerting a pressure of at least about 0.1 g/cm² onto the support.

95. A method according to claim 86, wherein the step b) comprises exerting a pressure of at least about 0.5 g/cm² onto the support.

20 96. (Amended) A method for treating an injured site of a body, comprising the step of:

A) implanting a biocompatible tissue support to a part or whole of the injured site,

25 wherein the biocompatible tissue support comprises:

A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows the second layer to resist *in vivo* impact,

30 wherein the first layer is attached to the second layer via at least one point[.] wherein the first layer is a knit, and wherein the second layer is a woven.

97. (Amended) A method for reinforcing an organ or tissue within a body, comprising the step of:

A) implanting a biocompatible tissue support to a

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part or whole of the injured site,

wherein the biocompatible tissue support comprises:

A-1) a first layer having a rough surface; and

5 A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

wherein the first layer is attached to the second
layer via at least one point[.] wherein the first layer is
a knit, and wherein the second layer is a woven.

10 98. (Amended) A method for producing or regenerating an organ
or tissue, comprising the steps of:

A) implanting a biocompatible tissue support to a
part or whole of the organ or tissue within an organism
containing the organ or tissue,

wherein the biocompatible tissue support comprises:

15 A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

20 wherein the first layer is attached to the second
layer via at least one point wherein the first layer is a
knit, and wherein the second layer is a woven; and

B) culturing the organ or tissue in the organism.

25 99. (Amended) Use of a biocompatible tissue support for
treatment of an injured site within a body, wherein

the biocompatible tissue support comprises:

A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

30 wherein the first layer is attached to the second
layer via at least one point wherein the first layer is a
knit, and wherein the second layer is a woven.

100. (Amended) Use of a biocompatible tissue support for
reinforcement of an organ or tissue within a body, wherein

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the biocompatible tissue support comprises:

· A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

5 wherein the first layer is attached to the second
layer via at least one point wherein the first layer is a
knit, and wherein the second layer is a woven.

101. (Amended) Use of a biocompatible tissue support for
production of a medicament for treatment of an injured site
10 within a body, wherein

the biocompatible tissue support comprises:

A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

15 wherein the first layer is attached to the second
layer via at least one point wherein the first layer is a
knit, and wherein the second layer is a woven.

102. (Amended) Use of a biocompatible tissue support for
production of a medicament for reinforcement of an organ
20 or tissue within a body, wherein

the biocompatible tissue support comprises:

A-1) a first layer having a rough surface; and

A-2) a second layer having a strength which allows
the second layer to resist *in vivo* impact,

25 wherein the first layer is attached to the second
layer via at least one point wherein the first layer is a
knit, and wherein the second layer is a woven.